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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* CHAO-NAN CHIEN, LONG-SONG SHISH, WEI-FANG WU,  
and CHIN-MING CHEN

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Appeal 2009-0035  
Application 10/840,056  
Technology Center 3700

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Decided: April 17, 2009

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*Before:* JENNIFER D. BAHR, MICHAEL W. O'NEILL, and STEFAN  
STAICOVICI, *Administrative Patent Judges.*

BAHR, *Administrative Patent Judge.*

DECISION ON APPEAL

## STATEMENT OF THE CASE

Chao-Nan Chien et al. (Appellants) appeal under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 1-3, 7-14, and 18-19. Claims 4-6 and 15-17 are withdrawn. We have jurisdiction over this appeal under 35 U.S.C. § 6 (2002).

### *The Invention*

Appellants' claimed invention is directed to a cooling fin structure wherein cooling fins are connected to a substrate by welding. Specification 3:2-6. At the contact interface between a fin and the substrate, a vacant region is defined on the fin such as to accommodate surplus solder and welding flux for the purpose of improving weld quality and decreasing thermal contact resistance. Specification 3:7-13.

Claims 1-3, 10, and 11, reproduced below, are illustrative of the claimed invention.

1. A cooling fin structure connected to a substrate with a solder, the cooling fin structure comprising:
  - at least one thermally conductive sheet, each of the thermally conductive sheets being bent to form a heat radiation part and a bonding part, the bonding part having a flat surface in contact with the substrate and being formed with a vacant region;
  - wherein the solder is disposed between the substrate and the bonding part, and the vacant region exposes the squeezed solder underneath.
2. The cooling fin structure of claim 1, wherein the vacant region is defined by notches formed on an edge of the bonding part.

3. The cooling fin structure of claim 1, wherein the bonding part has a serrate edge.

10. The cooling fin structure of claim 1, wherein the thermally conductive sheet is bent to form an L-shape cross-section.

11. A fin assembly, comprising:

a substrate; and

a plurality of cooling fins, each of which being bent towards one direction to form a heat radiation part and a bonding part, the bonding part having a flat surface soldered on a surface of the substrate to connect the cooling fins to the substrate;

wherein the bonding part is formed with a vacant region such that part area<sup>[1]</sup> of the surface of the substrate between adjacent two of the cooling fins is not covered by the cooling fins.

12. The fin assembly of claim 11, wherein the cooling fin is bent through sheet metal work.

18. The fin assembly of claim 11, wherein the thermally conductive material<sup>[2]</sup> is selected from

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<sup>1</sup> The language "part area" lacks strict antecedent basis in the claim. For purposes of this appeal, we understand the recited structure of "part area of the surface" to mean one or more part areas, or portions, of the surface. Appellants' drawings support one part area in fig. 4, and multiple part areas in figs. 2 and 3.

<sup>2</sup> The language "thermally conductive material" lacks strict antecedent basis in the claim. For purposes of this appeal, consistent with Appellants'

the group consisting of aluminum, copper, aluminum alloy, copper alloy, and their compounds.

19. The fin assembly of claim 11, wherein the material of the cooling fin is selected from the group consisting of aluminum, copper, aluminum alloy, copper alloy, and their compounds.

### *The Rejections*

Appellants seek review of the Examiner's rejection under 35 U.S.C. § 102(b) of claims 1-3, 7-14, 18, and 19 as being anticipated by Ito (US 5,558,155, issued Sep. 24, 1996)<sup>[3]</sup>.

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Specification, we understand the reference to "thermally conductive material" in claim 18 to be a recitation of the material of the cooling fin. Appellants' Specification provides: "a cooling fin structure is constructed by a thermally conductive sheet." Specification 3:2-3. Further, "a cooling fin ... is formed by a thermally conductive sheet bent to form...." Specification 4:10-12. This interpretation begs the question of the difference in scope between claim 18's material and the "material of the cooling fin" in claim 19, but we need not address this issue here. In the event of further prosecution of the subject matter of claim 18, Appellants and the Examiner should consider taking appropriate action to amend claim 18 to include a positive recitation that the fin is made of a "thermally conductive material."

<sup>3</sup> Appellants do not clearly state that dependent claims 7-9, 12, and 14 are to be reviewed on appeal in section VI - "Grounds of Rejection to be Reviewed on Appeal." Br. 3. Appellants however state they "appeal rejected Claims 1-3, 7-14, 18 and 19," in section III - "Status of the Claims." Br. 1. Because the dependent claims not listed in section VI are not canceled nor separately argued, we determine that the non-listed dependent claims stand or fall in accordance with the independent claims explicitly set out in section VI.

## SUMMARY OF DECISION

We AFFIRM-IN-PART and ENTER NEW GROUNDS OF REJECTION PURSUANT TO OUR AUTHORITY UNDER 37 C.F.R. § 41.50(b).

## ISSUES

Appellants argue that Ito does not anticipate all elements of claims 1-3, 7-14, 18, and 19. Appellants present separate arguments for claims 1, 2, 3, 10, and 11. In accordance with 37 C.F.R. § 41.37(c)(1)(viii), claims 7-9 stand or fall with claim 1. We separately address each of claims 2, 3, and 10, and we address claims 11-14, 18, and 19 together.

The issues presented in this appeal are as follows:

- (1) Have Appellants demonstrated that the Examiner erred in showing Ito describes all elements of claim 1? In particular, does Ito describe a "bonding part having a flat surface ... and being formed with a vacant region," and does Ito describe that "the vacant region exposes the squeezed solder underneath"? Br. 3-4. The issue turns on whether Ito shows a vacant region that exposes the solder underneath at fig. 6 items 18g. Br. 4; Ans. 4-5.
- (2) Have Appellants demonstrated that the Examiner erred in showing Ito describes all elements of claim 11? In particular, do V-shaped sections 18g of fig. 6 of Ito "cover" the substrate? Br. 5-6; Ans. 5-6.
- (3) Have Appellants demonstrated that the Examiner erred in showing Ito describes all elements of claim 2? In particular, does Ito describe "notches"? This issue turns on whether V-shaped sections 18g of fig. 6 of Ito are notches. Br. 7; Ans. 6.

- (4) Have Appellants demonstrated that the Examiner erred in showing Ito describes all elements of claim 3? In particular, does Ito describe a "serrate edge"? This issue turns on whether V-shaped sections 18g of fig. 6 of Ito form a serrate edge. Br. 7; Ans. 6.
- (5) Have Appellants demonstrated that the Examiner erred in showing Ito describes all elements of claim 10? In particular, does Ito describe an "L-shaped cross-section"? This issue turns on whether fig. 3 of Ito, with a corresponding [-shaped cross-section fin, describes an L-shaped cross-section fin. Br. 8; Ans. 6.
- (6) Does Ito describe all elements of claims 11, 12, 14, 18, and 19? In particular, does Ito describe in fig. 2 a "part area of the surface of the substrate ... not covered by the cooling fins"? This issue turns on whether the substrate (plate 12) is "covered" at the square notches at the bases of projections 13f.
- (7) Would the subject matter of claims 10 and 13 have been obvious in view of Ito and Appellants' admitted prior art? In particular, would it have been obvious to modify an L-shaped cooling fin with a bonding part described by Ito?

#### FACTS PERTINENT TO THE ISSUES

- FF1 Ito describes a flat surface of a bonding portion (lower edge section) of a cooling fin 18 between items 18g in fig. 6. The bonding portion is the part of the fin used to attach the fin to the substrate. See e.g. fig. 3.
- FF2 Ito describes two V-shaped sections on the bonding portion of a cooling fin at items 18g of fig. 6. Each section forms an empty region

- that acts as a reservoir for excess brazing material. Ito, col. 6, ll. 35-41.
- FF3 Neither claim 1 nor the specification defines the object that the solder is intended to be exposed to or in what manner or direction it is exposed. Specification, *passim*.
- FF4 The V-shaped sections 18g act as a reservoir for excess brazing (FF2), but are not closed on all sides such that brazing would be visible to an observer at certain angles, such as a view running through the page in fig. 6. As such, Ito describes the solder being exposed to visual perception in fig. 6.
- FF5 The V-shaped sections 18g shown in Fig. 6 of Ito overlie the substrate to which the fin is mounted.
- FF6 A person of ordinary skill in the art would have understood that "cover" means "to place or spread something over so as to protect or conceal." *Collins English Dictionary* (London 2000).
- FF7 A person of ordinary skill in the art would have understood that "notch" means "a V-shaped cut or indentation; nick." *Collins English Dictionary* (London 2000).
- FF8 Neither claim 2 nor the specification defines a particular quantity or configuration of the "notches," other than the notches must be on the edge of the bonding portion of the fin. Specification, *passim*.
- FF9 A person of ordinary skill in the art would have understood that "serrate" means "notched or toothed on the edge." *Merriam Webster College Dictionary* (10th ed. 1997).



- FF10 Neither claim 3 nor the specification defines a particular quantity or configuration of the "serrate edge," other than the serrate edge must be on the bonding portion of the fin. Specification, *passim*.
- FF11 Ito discloses a [-shaped fin (figs. 1-6, 22-26), a Z-shaped fin (figs. 7-12), an S-shaped fin (figs. 13-15), a corrugated fin (figs. 16-18), and an alternative [-shaped fin (figs. 19-20).
- FF12 Neither claim 11 nor the specification defines the "part area" of the surface of the substrate that is not covered by the cooling fins.
- FF13 Ito describes portions of the substrate that remain uncovered by the cooling fins in the concave notches 13d of fig. 2 and the square notches at the base of convex tabs 13f (further described in fig. 5A by the dashed lines near tab 13f). The concave notches 13d and 13f mate to create an integral unit of fins. Ito, fig. 2. However, the square notches at the base of convex tabs 13f are not filled with a mate, leaving them open throughout the structure. An example of this is shown in fig. 2.
- FF14 Claim 11 does not require that the "not covered" portion of the substrate take any particular form, size, or shape. According to the specification, the "not covered" portion "can serve as an additional space ... to accommodate ... flux and the surplus solder." Specification 3:7-11; 6:18-19. Further, the "not covered" portion allows "most of the welding flux" to be "not left on the welding area." Specification 5:5-11. Still further, "the shape, number and area of the vacant region is not limited." Specification 6:17-18.
- FF15 Ito describes that cooling fins 13 are made from a brazing sheet plate having a core material made of aluminum alloy. Ito, col. 5, ll. 29-32.

This sheet plate is bent into the appropriate shape (e.g., "[," "Z," "S") to form cooling fin 13. Ito, col. 5, ll. 38-44. Cooling fins 13 are mounted on flat plate 12 that is also made of aluminum alloy. Ito, col. 5, ll. 23-26.

FF16 L-shaped cooling fins are admitted prior art. Figures 1A-C of the Appellants' drawings depict an L-shaped cooling fin labeled "PRIOR ART."

### PRINCIPLES OF LAW

Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention. *RCA Corp. v. Applied Digital Data Sys., Inc.*, 730 F.2d 1440, 1444 (Fed. Cir. 1984). In other words, there must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. *Scripps Clinic & Research Found. v. Genentech Inc.*, 927 F.2d 1565, 1576 (Fed. Cir. 1991). It is not necessary that the reference teach what the subject application teaches, but only that the claim read on something disclosed in the reference, i.e., that all of the limitations in the claim be found in or fully met by the reference. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 772 (1984).

When claim terminology is construed in the United States Patent and Trademark Office, claims are to be given their broadest reasonable interpretation consistent with the specification, reading claim language in light of the specification as it would be interpreted by one of ordinary skill in

the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004).

While there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness, “the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int’l. Co. v. Teleflex Inc.*, 550 U.S. 398, \_\_\_, 127 S. Ct. 1727, 1741 (2007).

When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.

*Id.* at \_\_\_, 127 S. Ct. at 1740. We must ask whether the improvement is more than the predictable use of prior art elements according to their established functions. *Id.*

Common sense teaches . . . that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle. . . . A person of ordinary skill is also a person of ordinary creativity, not an automaton.

*Id.* at \_\_\_, 127 S. Ct. at 1742. Moreover, an artisan must be presumed to know something about the art apart from what the references disclose. *See In re Jacoby*, 309 F.2d 513, 516 (CCPA 1962).

## ANALYSIS

### *Issue (1) - Anticipation of Claim 1*

As noted in our findings above, Ito discloses a bonding portion of a cooling fin that has a flat surface (FF1) and two V-shaped sections forming a vacant portion underneath each section (FF2). Appellants argue that the V-shaped section is a separate part of the fin in Ito, and not part of the flat surface. Br. 4. However, claim 1 requires that the bonding portion has a flat surface and a vacant region, not that the flat surface has a vacant region. Claim 1 states: "the bonding part having a flat surface in contact with the substrate and being formed with a vacant region." The grammatical structure of the sentence allows the interpretation that the "bonding part" has two features: a "flat surface" and a "vacant region." Ito discloses both parts of the "bonding part" at fig. 6. FF1; FF2. Appellants' argument that the flat surface must contain the "vacant region" fails because it requires an unduly narrow interpretation of the claims.

Appellants further argue that the V-shaped section does not "expose" the solder, as required by claim 1. Br. 4. Appellants do not make any argument for a particular object the solder is supposed to be exposed to. Claim 1 does not require that the solder be exposed in any particular way. FF3. Instead, claim 1 merely requires that "the vacant region exposes the squeezed solder." The solder is visible under the V-notch to an observer viewing the cooling fins at an angle perpendicular to the plane of the fin's

surface. FF4. Appellants' argument is not found persuasive because the solder is exposed to visual inspection.

In light of the above, Appellants' arguments do not persuade us that the Examiner erred in rejecting claim 1 as being anticipated by Ito, or claims 7-9, which stand or fall with claim 1.

*Issue (2) - Anticipation of Claim 11*

As noted above, Ito discloses a cooling fin with a bonding portion having V-shaped sections that form vacant regions (FF2). Appellants argue that the bonding portion having the V-shaped sections described by items 18g of fig. 6 of Ito cover the substrate. Br. 5.

The Examiner disagrees. The Examiner states that the "vacant region is not covered, in that an unobstructed line of sight extends between the substrate 12 and the concave sections 18g...." Ans. 5. However, we note that claim 11 does not require that the vacant portion is "not covered." Instead, the claim requires that the *substrate* is "not covered" in some "part area." The Examiner's position that the vacant region is not covered therefore does not address the claimed structure.

While the vacant regions beneath V-shaped sections 18g of fig. 6 of Ito may expose the brazing material, the V-shaped sections 18g do overlie, or cover, the substrate (plate 12). FF5; FF6. Fig. 6 does not appear to show that the V-shaped sections 18g relied upon by the Examiner are provided with any gaps, holes, or other structures so as to leave any portion of the substrate (plate 12) beneath uncovered.

We agree with Appellants that the V-shaped sections 18d of Ito illustrated in fig. 6 do not support the Examiner's position that Ito teaches a

cooling fin assembly wherein "part area of the surface of the substrate between adjacent two of the cooling fins is not covered by the cooling fins," as called for in claim 11. Accordingly, we reverse the Examiner's 35 U.S.C. § 102(b) rejection of claim 11, as well as claims 12-14, 18, and 19, which depend from claim 11, as anticipated by Ito.

*Issue (3) - Anticipation of Claim 2*

As shown in the findings of fact above, Ito discloses a cooling fin with a bonding portion (FF1) having V-shaped sections that form vacant regions (FF2). Further, a person of ordinary skill in the art would have understood that "notch" means "a V-shaped cut or indentation." FF7. Appellants argue that the V-shaped sections of Ito are "only defined on the ends of the fins." Br. 7. However, claim 2 does not require any particular number or configuration of notches. FF8. The edge of the bonding part of the fin in Ito has two V-like shapes (FF2), which would be understood by one of ordinary skill to be notches (FF7). Therefore, Appellants' arguments do not persuade us that the Examiner erred in rejecting claim 2 as being anticipated by Ito.

*Issue (4) - Anticipation of Claim 3*

As shown in the findings of fact above, Ito discloses a cooling fin with a bonding portion (FF1) having V-shaped sections that form vacant regions (FF2). These V-shaped sections would be understood by one of ordinary skill to be notches. FF7; Issue (3). Further, a person of ordinary skill in the art would have understood that "serrate" means "notched or toothed on the edge." FF9. The notches of Ito create a serrate edge because the bonding portion has notches along one edge, as shown in fig. 6.

Appellants argue that the two notches are discontinuous. Br. 7. However, the claim does not specify any particular serrate configuration, such as a "continuous serrate edge." FF10. Appellants further argue that a serrate edge should "look like teeth (plural) of saw [*sic*]." Again, the claim does not specify any particular serrate configuration, such as a "saw-like serrate edge." FF10. Appellants' arguments are based on language not found in the claim. It is well established that limitations not appearing in the claims cannot be relied upon for patentability. *In re Self*, 671 F.2d 1344, 1348 (CCPA 1982). Appellants' arguments do not persuade us that the Examiner erred in rejecting claim 3 as anticipated by Ito.

*Issue (5) - Anticipation of Claim 10*

As shown in the findings of fact above, Ito discloses several shaped fins, including a [-shape. FF11. Appellants argue that a [-shaped cross section is not an L-shaped cross section. Br. 8. The Examiner responds that the [-shape is an L-shape with "top portions." Ans. 6.

We agree with Appellants that an L-shaped cross section is not anticipated by a [-shaped cross section. While the [-shape can be construed as comprising or including an L-shape, we cannot agree with the Examiner that a [-shaped *cross section* can be construed as an L-shaped *cross section* with an additional top section. The "top portions" alluded to by the Examiner are additional structure that makes the cross section something other than an L-shape. Although additional structure is permitted by the "comprising" language of the claim, that additional structure cannot change the cross section of the cooling fin to a shape other than an L-shape. We agree with Appellants that Ito does not show a cooling fin with an L-shaped

cross section at fig. 6 and reverse the Examiner's 35 U.S.C. § 102(b) rejection of claim 10 as anticipated by Ito.

*Issue (6) - Anticipation of Claims 11, 12, 14, 18, and 19 under New Grounds of Rejection*

Notwithstanding our finding above that the V-shaped sections 18g of fig. 6 of Ito do not satisfy the limitation of a "part area" of the substrate "not covered" by the fin, we find that Ito does describe this limitation at fig. 2. The claim does not specify the location at which the substrate is "not covered" by the fins. FF12. Ito discloses two locations where the fin does not cover the substrate, the concave notches 13d of fig. 2 and the square notches at the base of convex tabs 13f. FF13. The concave notches 13d and 13f mate to create an integral unit of fins. *Id.* However, the square notches at the base of convex tabs 13f are not filled with a mate, leaving them open throughout the structure. *Id.* Further, claim 11 does not specify the extent of the substrate "not covered." FF14. The Specification advocates a broad reading of the "not covered" portion and does not limit the portion to be of any particular shape or size. FF14.

Appellants argue that the purpose of the vacant region is to "freely allow flow." Br. 6. However, neither the claims nor the specification require that the "not covered" portion be of any particular size such as to allow free flow. FF14. Moreover, claim 11 does not call for the "not covered" part area to freely allow flow.

Consequently, the square notches at the base of convex tabs 13f serve as a vacant region such that a "part area" of the substrate is "not covered" by the fins. These areas expose the substrate underneath, such that the substrate



is "not covered" in these portions under the broadest reasonable interpretation of the claims in light of the Specification. *See* FF6.

Therefore, we find that the subject matter of claim 11 is anticipated by Ito.

Although claims 12, 14, 18, and 19 were not separately argued by Appellants or addressed by the Examiner, we briefly address them here. Regarding claim 12, Ito describes that the fins are made by bending (i.e. working) a metal sheet plate. FF15. Regarding claim 14, Ito describes the edge of the bonding part of the fin as having two V-like shapes (FF2), which would be understood by one of ordinary skill to be notches (FF7). See also Issue (3) above. Regarding claims 18 and 19, Ito describes the fins as being made from an aluminum alloy. FF15. Therefore, all elements of claims 12, 14, 18, and 19 are anticipated by Ito.

In light of the above, we find that the subject matter of claims 11, 12, 14, 18, and 19 is anticipated by Ito. Therefore, pursuant to our authority under 37 C.F.R. § 41.50(b), we reject claims 11, 12, 14, 18, and 19 under 35 U.S.C. § 102(b) as anticipated by Ito.

*Issue (7) - Obviousness of Claims 10 and 13 under New Grounds of  
Rejection*

As shown in the analysis of Issue (5) above, Ito fails to explicitly disclose a fin with an L-shaped cross section. However, L-shaped cooling fins are admitted by Appellants to be old and well known in the art. FF16. It would have been obvious to a person having ordinary skill in the art at the time of invention to modify the base portion of a standard L-shaped cooling fin with the interlocking base portions described in Ito for the purpose of

reducing clearance between fins and producing a more efficient cooling apparatus. Ito, col. 2, ll. 40-46.

While Ito mainly focuses on fins formed by bending both the upper and lower edges of the fins to form bases, Ito only requires "bending at least one of upper and lower edge sections." Ito, Abstract. Therefore, the modification of the shape of the fin used by Ito would yield predictable results so long as at least one edge was bent to allow for an interlocking fin design.

In light of the above, we find that the subject matter of claims 10 and 13 would have been obvious in view of Ito and the admitted prior art. Therefore, pursuant to our authority under 37 C.F.R. § 41.50(b), we reject claims 10 and 13 under 35 U.S.C. § 103(a) as being unpatentable over Ito and Appellants' admitted prior art.

#### CONCLUSIONS OF LAW

- (1) Appellants have not demonstrated that the Examiner erred in finding Ito describes all elements of claim 1. In particular, Ito describes a "bonding part having a flat surface ... and being formed with a vacant region," and that "the vacant region exposes the squeezed solder underneath."
- (2) Appellants have demonstrated that the Examiner erred in finding Ito describes all elements of claim 11. In particular, Ito's V-shaped sections 18g shown in fig. 6 do cover the substrate (plate 11).
- (3) Appellants have not demonstrated that the Examiner erred in finding Ito describes all elements of claim 2. In particular, Ito describes "notches."

- (4) Appellants have not demonstrated that the Examiner erred in finding Ito describes all elements of claim 3. In particular, Ito describes a "serrate edge."
- (5) Appellants have demonstrated that the Examiner erred in finding Ito describes all elements of claim 10. In particular, Ito does not explicitly describe an "L-shaped cross section."
- (6) The subject matter of claims 11, 12, 14, 18, and 19 is anticipated under 35 U.S.C. § 102(b) by Ito. In particular, Ito describes a "part area of the surface of the substrate ... not covered by the cooling fins" in fig. 2.
- (7) The subject matter of claims 10 and 13 would have been obvious under 35 U.S.C. § 103(a) in view of Ito and Appellants' admitted prior art.

### DECISION

The Examiner's decision is affirmed as to claims 1-3 and 7-9, and reversed as to claims 10-14, 18, and 19. A new ground of rejection of claims 10-14, 18 and 19 is entered pursuant to 37 C.F.R. § 41.50(b).

Regarding the affirmed rejection(s), 37 CFR § 41.52(a)(1) provides "[a]ppellant may file a single request for rehearing within two months from the date of the original decision of the Board."

In addition to affirming the Examiner's rejection(s) of one or more claims, this decision contains new grounds of rejection pursuant to 37 C.F.R. § 41.50(b). 37 C.F.R. §41.50(b) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review."

37 C.F.R. § 41.50(b) also provides that Appellants, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution.* Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .

(2) *Request rehearing.* Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

Should Appellants elect to prosecute further before the Examiner pursuant to 37 C.F.R. § 41.50(b)(1), in order to preserve the right to seek review under 35 U.S.C. § 141 or 145 with respect to the affirmed rejection, the effective date of the affirmance is deferred until conclusion of the prosecution before the Examiner unless, as a mere incident to the limited prosecution, the affirmed rejection is overcome.

If Appellants elect prosecution before the Examiner and this does not result in allowance of the application, abandonment or a second appeal, this case should be returned to the Board of Patent Appeals and Interferences for final action on the affirmed rejection, including any timely request for rehearing thereof.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED-IN-PART; 37 C.F.R. § 41.50(b).

Appeal 2009-0035  
Application 10/840,056

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